

RF Test Data for 2.4G (Conducted Measurements)

General Description of EUT	
Product Name:	AIBOT2 AI humanoid robot
Test Model:	R12E
Sample ID:	HC-C-202404-0185-01-01-2#
Environmental Conditions	
Temperature:	23.8℃
Relative Humidity:	48%
Test Voltage:	DC 7.2V
Test Engineer:	ZKN ZHOU
Note: For a more detailed features description, please refer to the report TBR-C-202404-0185-3 The report only show the worst case data.	

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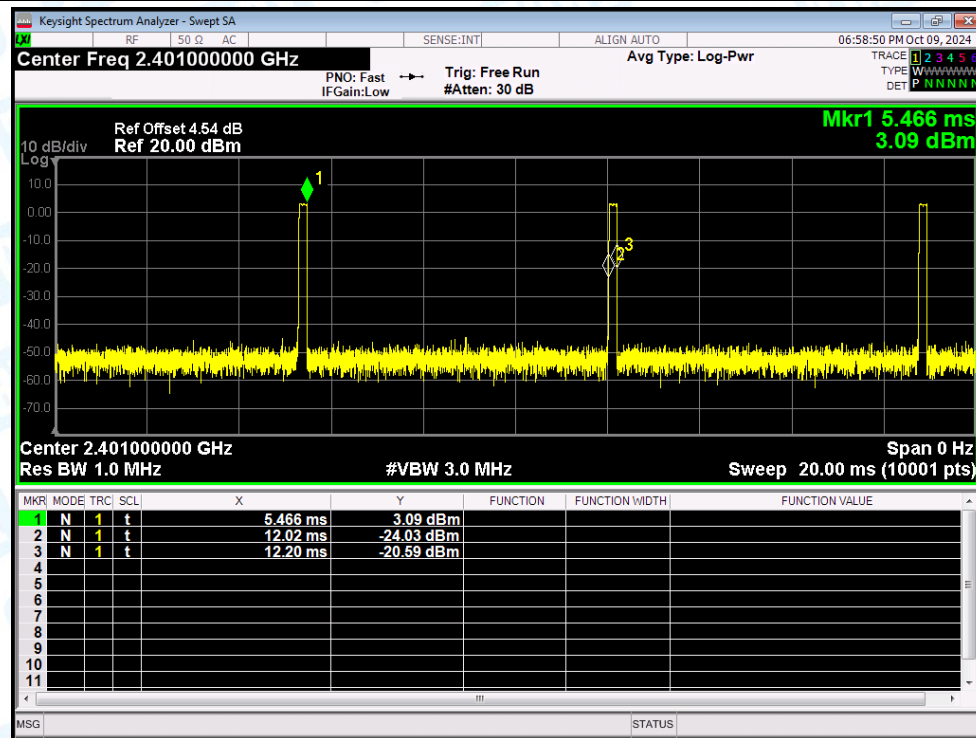
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1. Duty Cycle

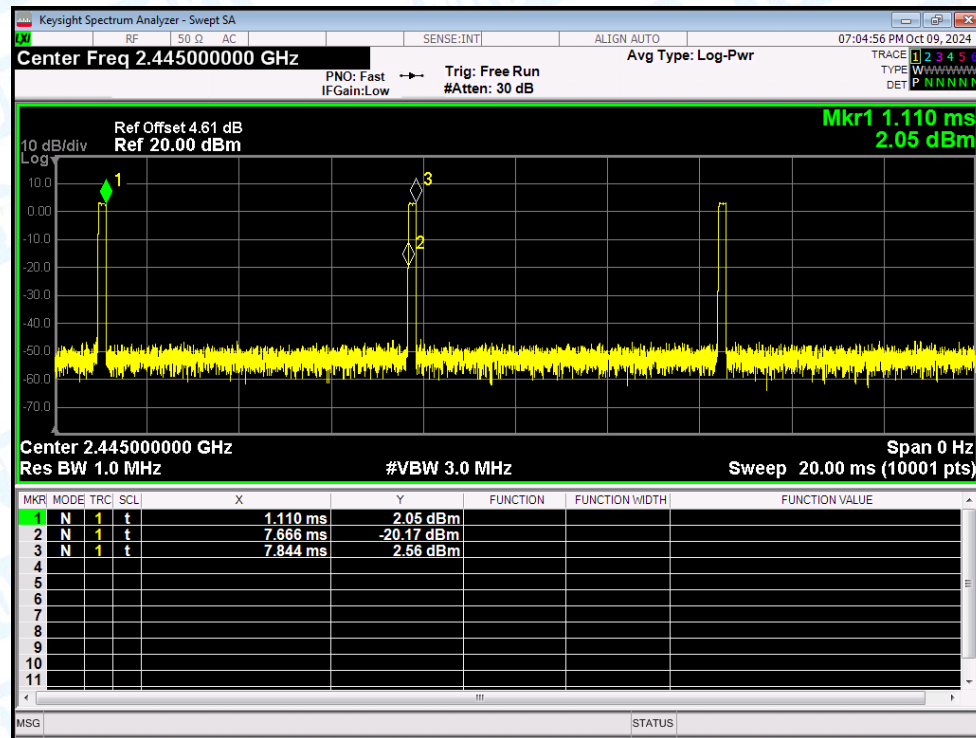
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	2.4G	2401	Ant1	2.67	15.73	5.56
NVNT	2.4G	2445	Ant1	2.64	15.78	5.62
NVNT	2.4G	2481	Ant1	2.64	15.78	5.62

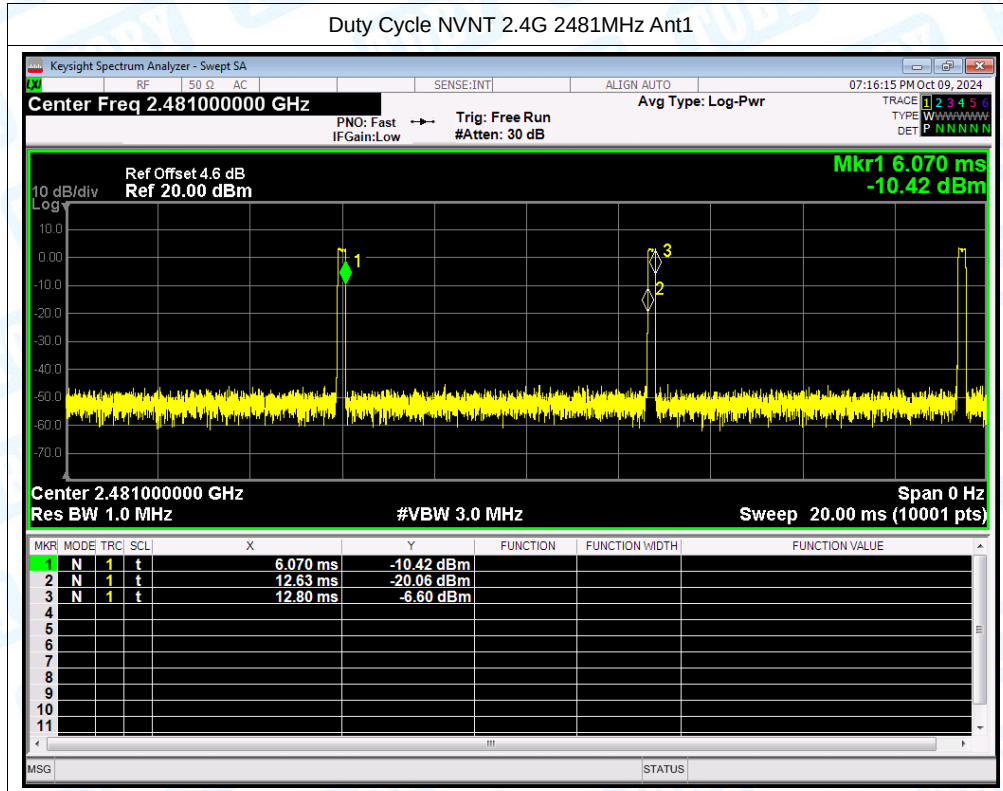
Test Graphs

Duty Cycle NVNT 2.4G 2401MHz Ant1



Duty Cycle NVNT 2.4G 2445MHz Ant1



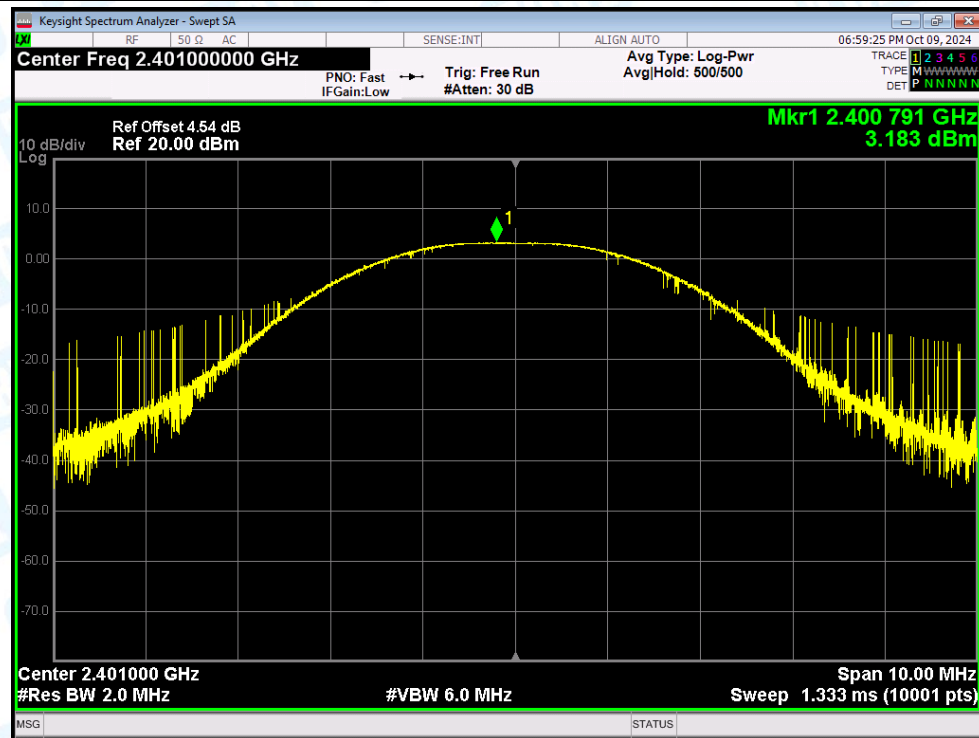


2. Maximum Conducted Peak Output Power

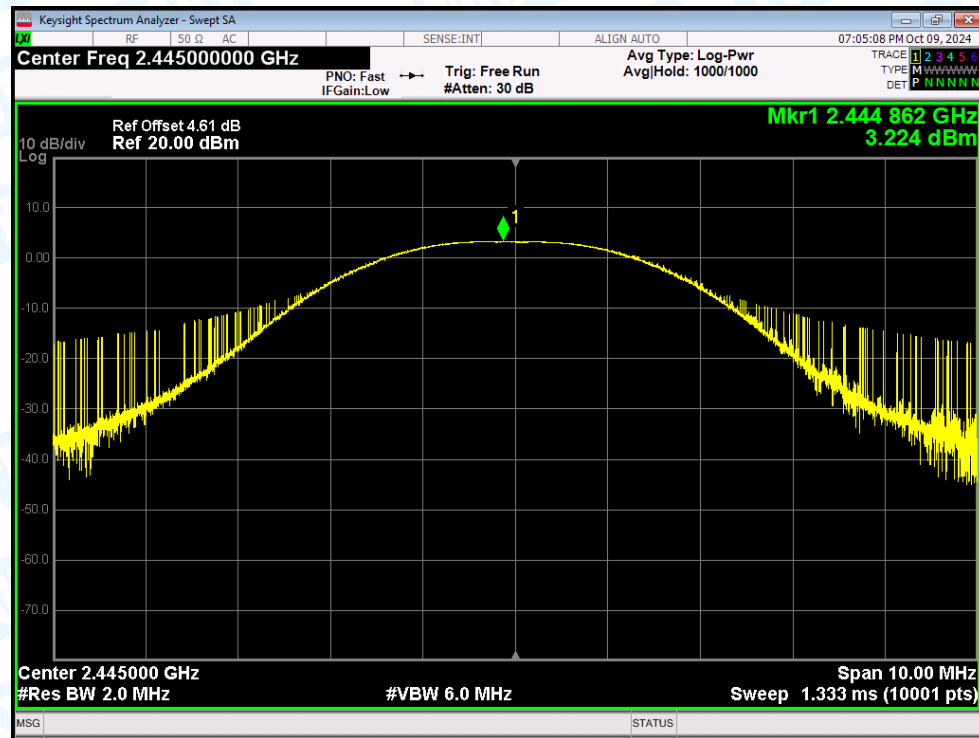
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	2.4G	2401	Ant1	3.183	30	Pass
NVNT	2.4G	2445	Ant1	3.224	30	Pass
NVNT	2.4G	2481	Ant1	3.291	30	Pass

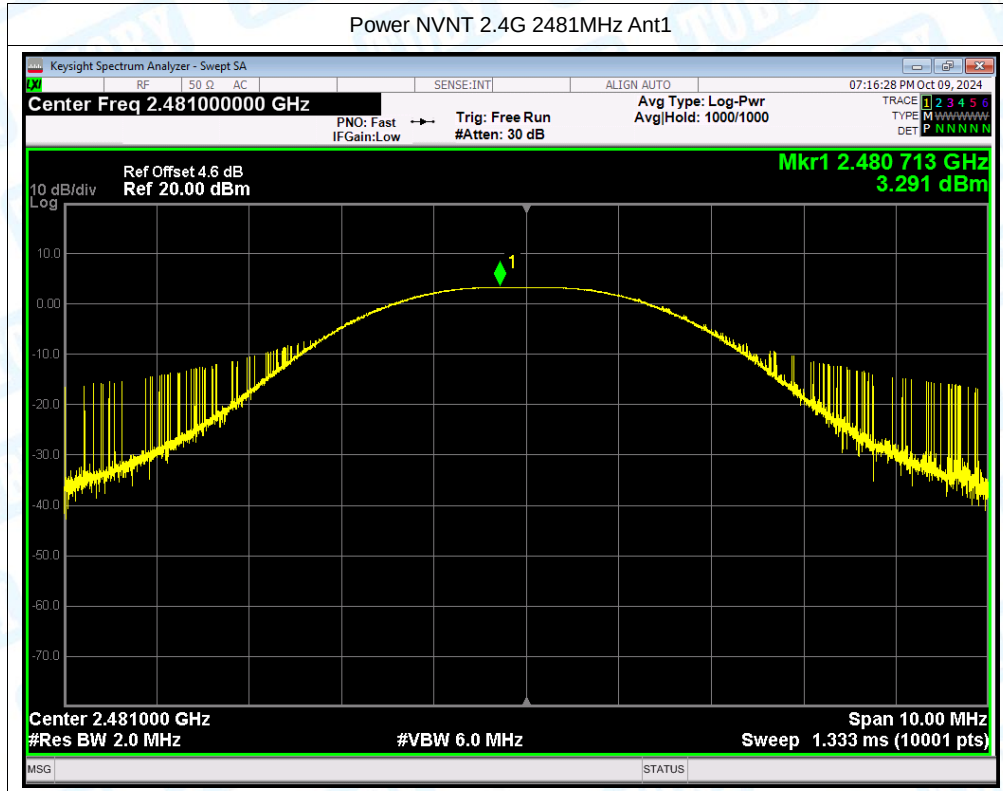
Test Graphs

Power NVNT 2.4G 2401MHz Ant1



Power NVNT 2.4G 2445MHz Ant1



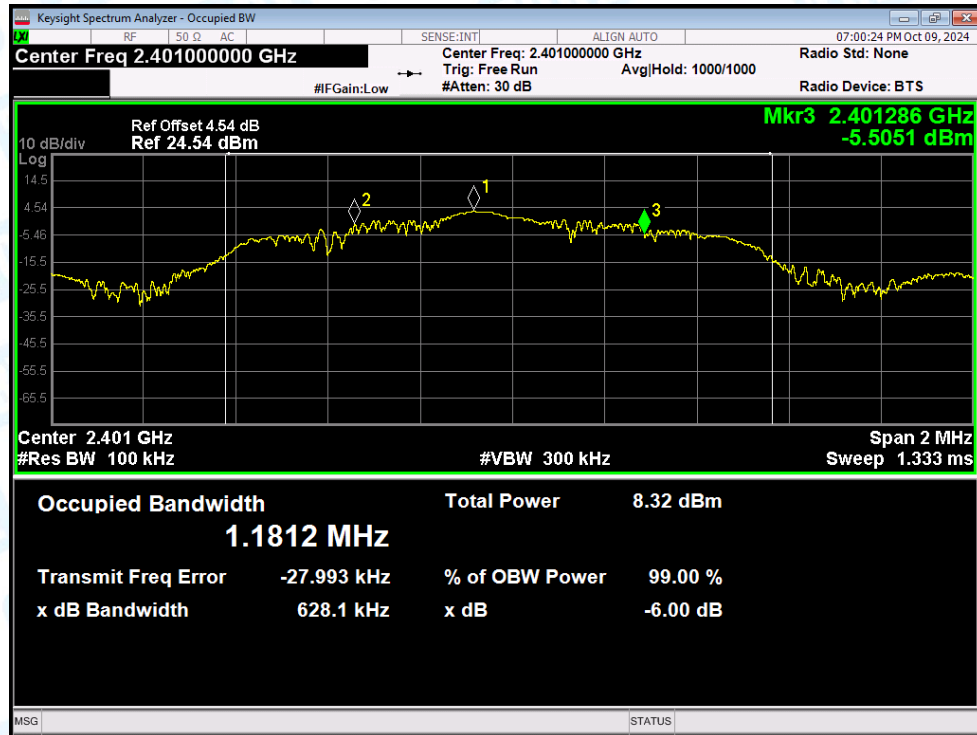


3. -6dB Bandwidth

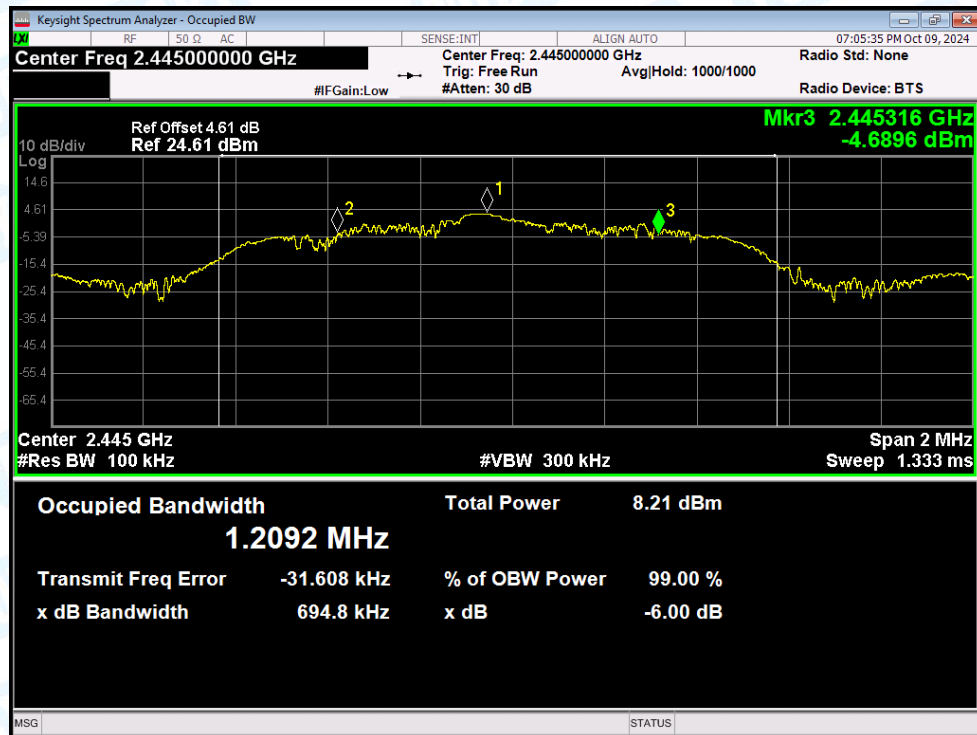
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	2.4G	2401	Ant1	0.63	0.5	Pass
NVNT	2.4G	2445	Ant1	0.69	0.5	Pass
NVNT	2.4G	2481	Ant1	0.78	0.5	Pass

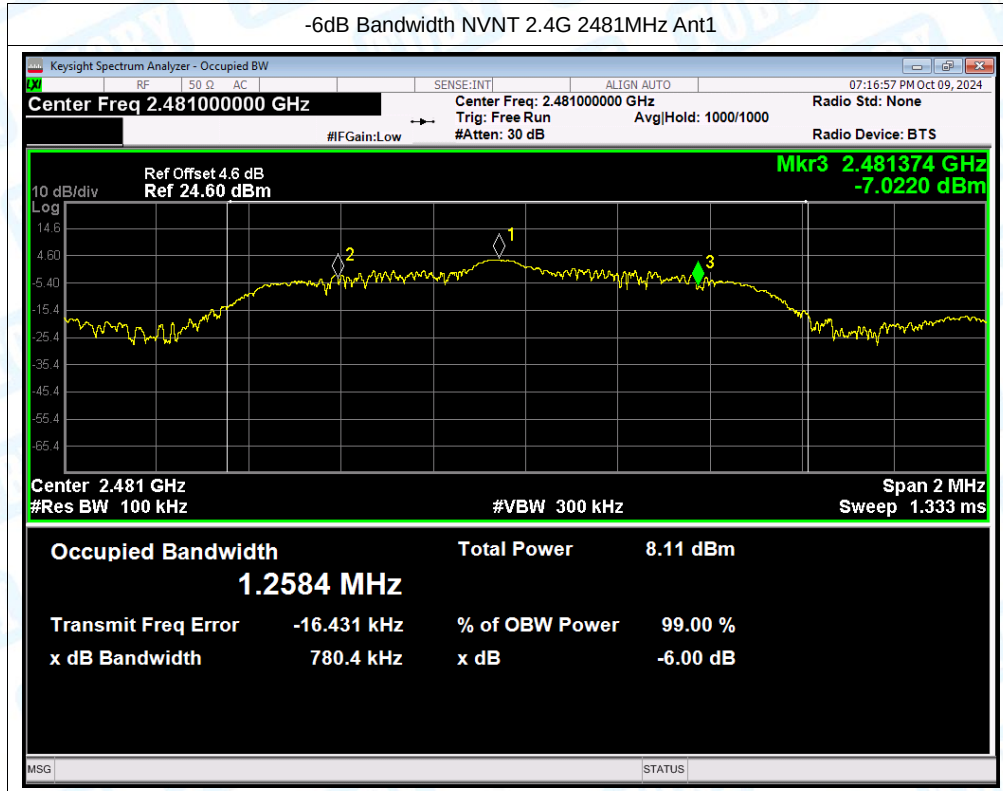
Test Graphs

-6dB Bandwidth NVNT 2.4G 2401MHz Ant1



-6dB Bandwidth NVNT 2.4G 2445MHz Ant1



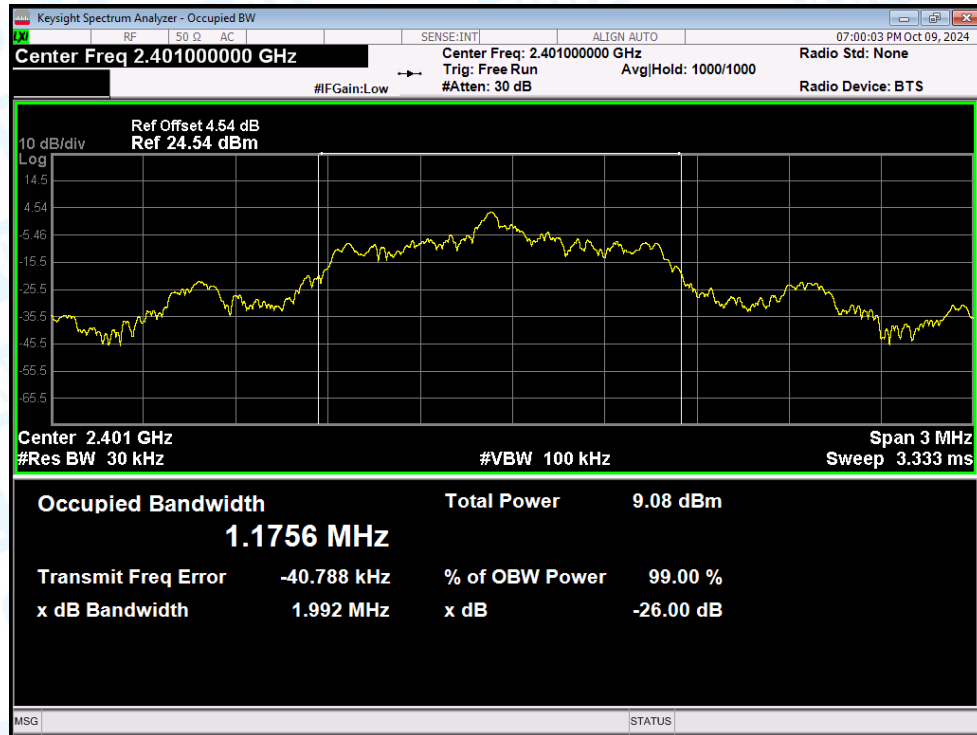


4. Occupied Channel Bandwidth

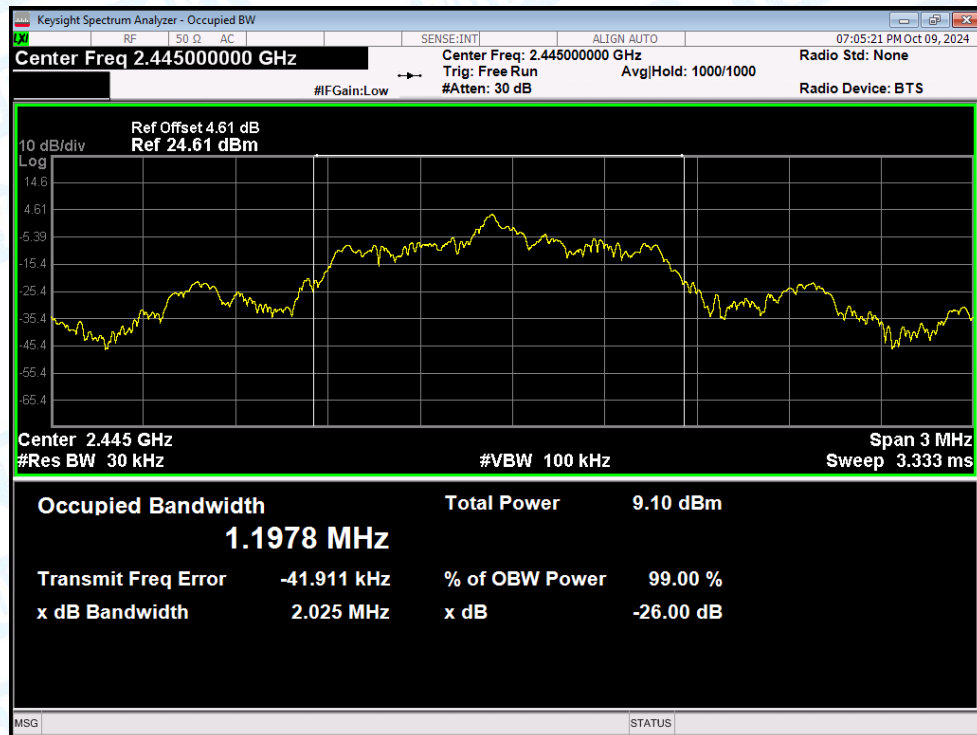
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	2.4G	2401	Ant1	1.176
NVNT	2.4G	2445	Ant1	1.198
NVNT	2.4G	2481	Ant1	1.363

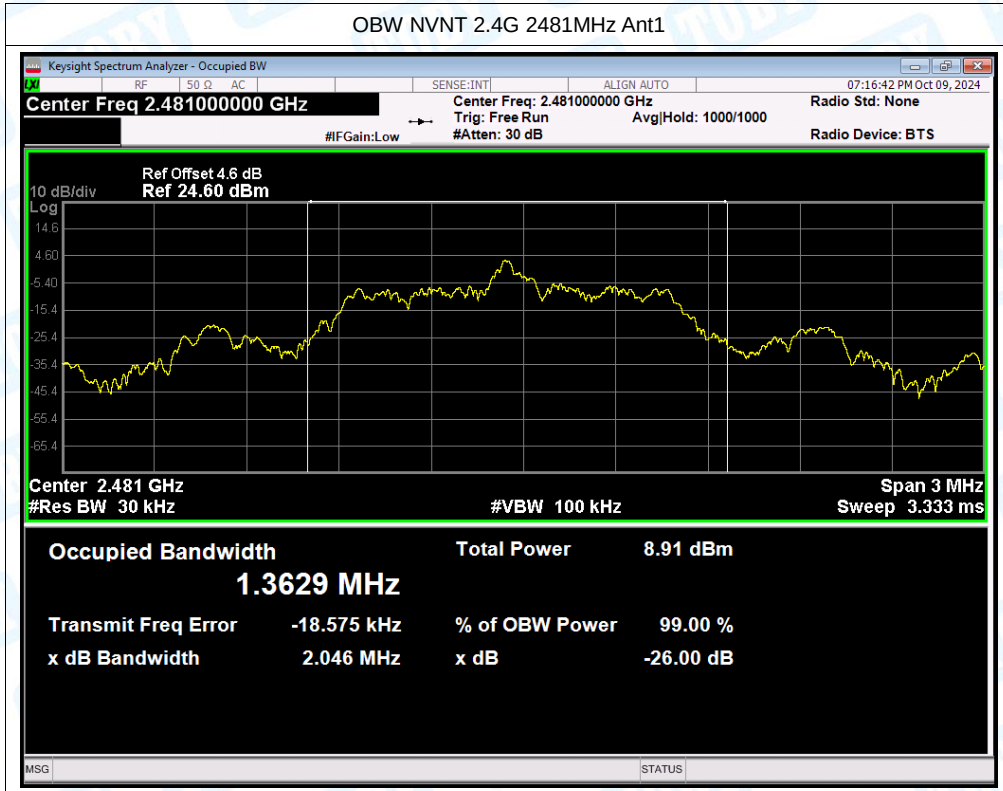
Test Graphs

OBW NVNT 2.4G 2401MHz Ant1



OBW NVNT 2.4G 2445MHz Ant1





5. Maximum Power Spectral Density Level

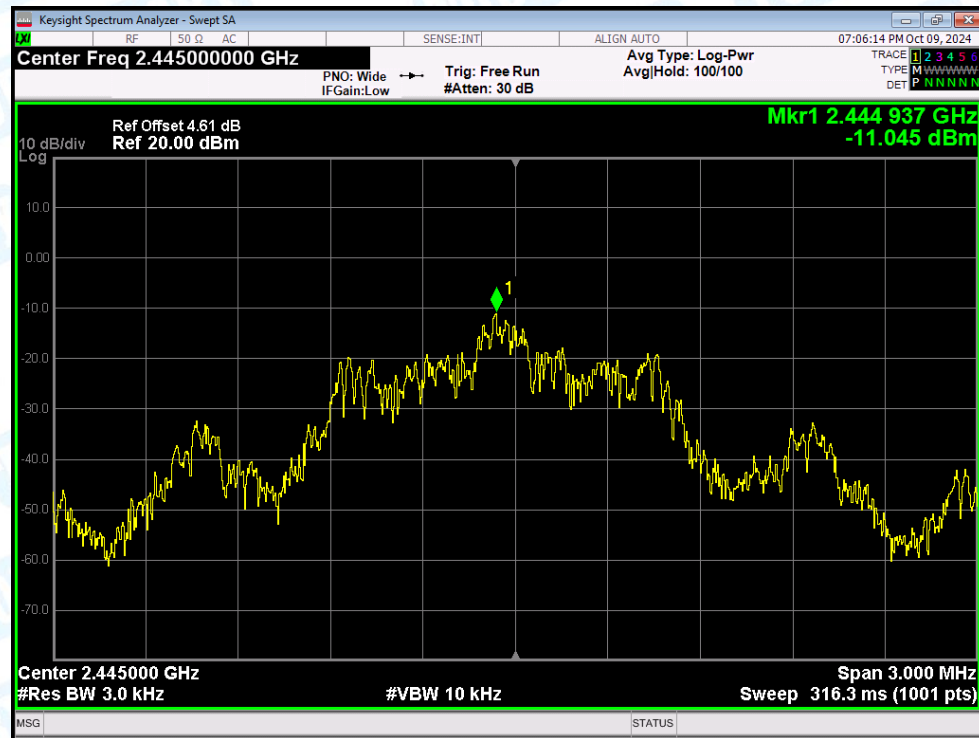
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	2.4G	2401	Ant1	-10.892	8	Pass
NVNT	2.4G	2445	Ant1	-11.045	8	Pass
NVNT	2.4G	2481	Ant1	-10.937	8	Pass

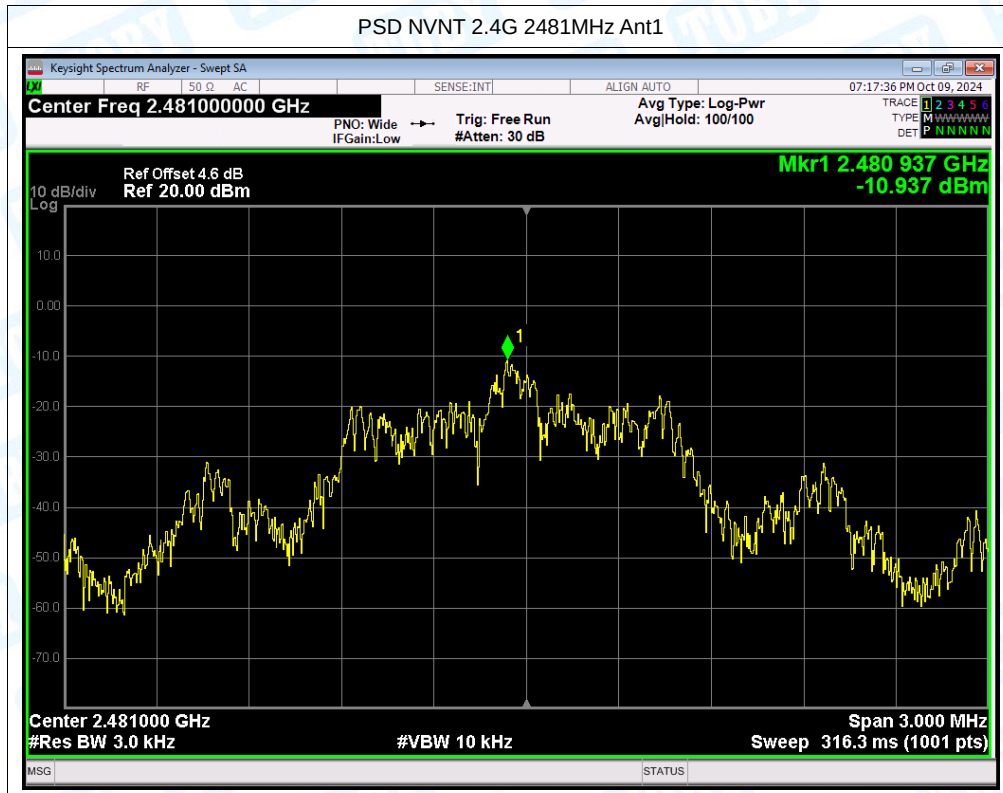
Test Graphs

PSD NVNT 2.4G 2401MHz Ant1



PSD NVNT 2.4G 2445MHz Ant1





6. Band Edge

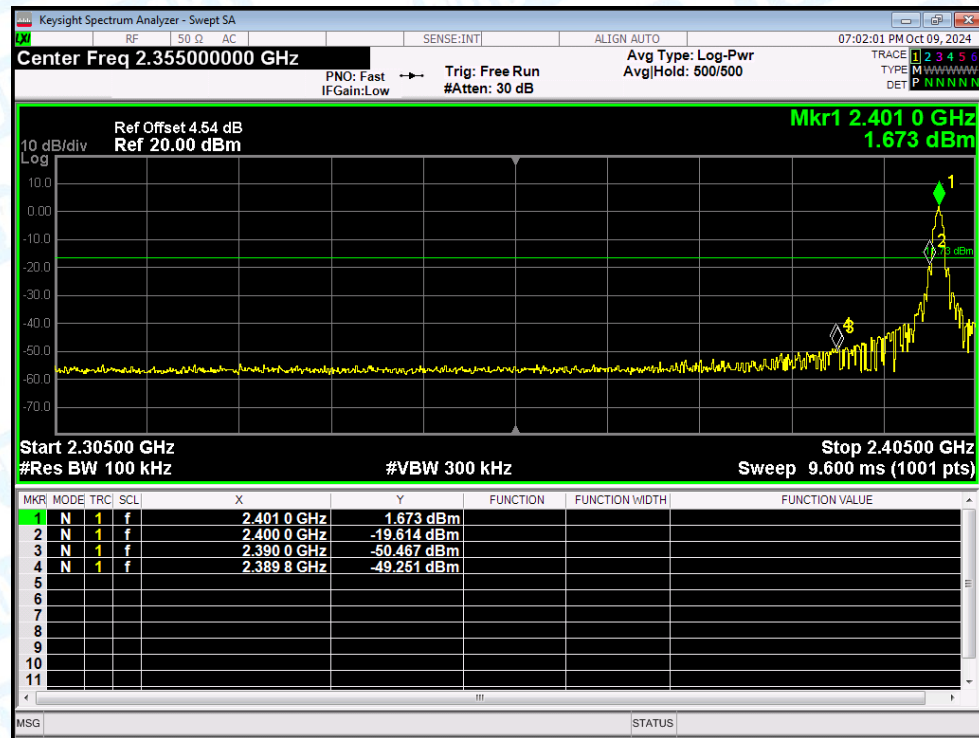
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	2.4G	2401	Ant1	-52.52	-20	Pass
NVNT	2.4G	2481	Ant1	-40.76	-20	Pass

Test Graphs

Band Edge NVNT 2.4G 2401MHz Ant1 Ref



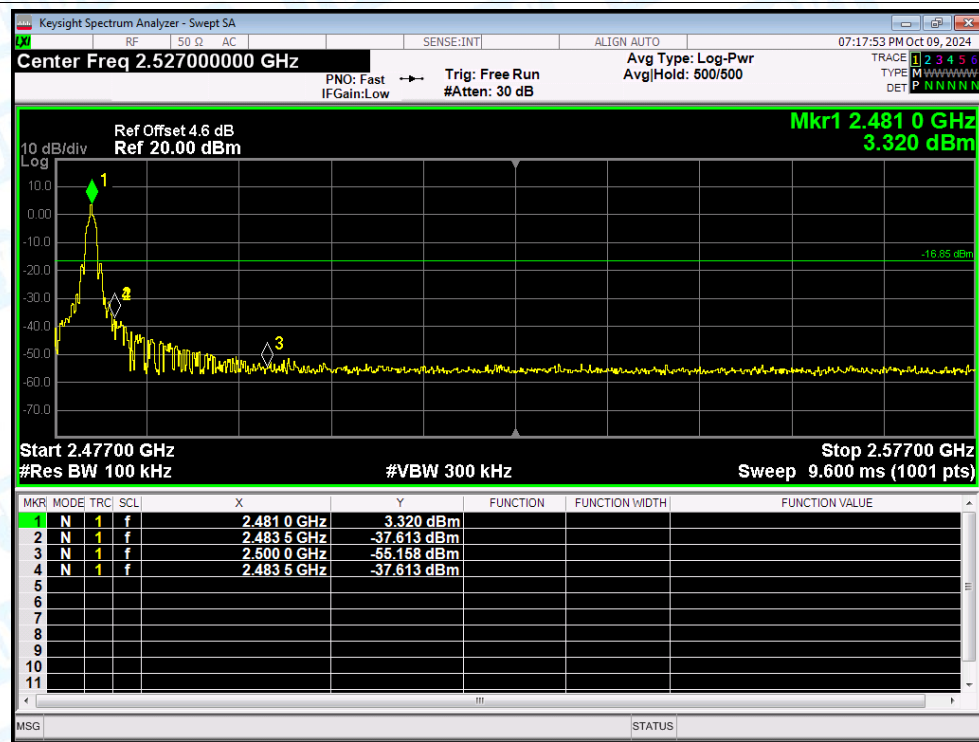
Band Edge NVNT 2.4G 2401MHz Ant1 Emission



Band Edge NVNT 2.4G 2481MHz Ant1 Ref



Band Edge NVNT 2.4G 2481MHz Ant1 Emission



7. Conducted RF Spurious Emission

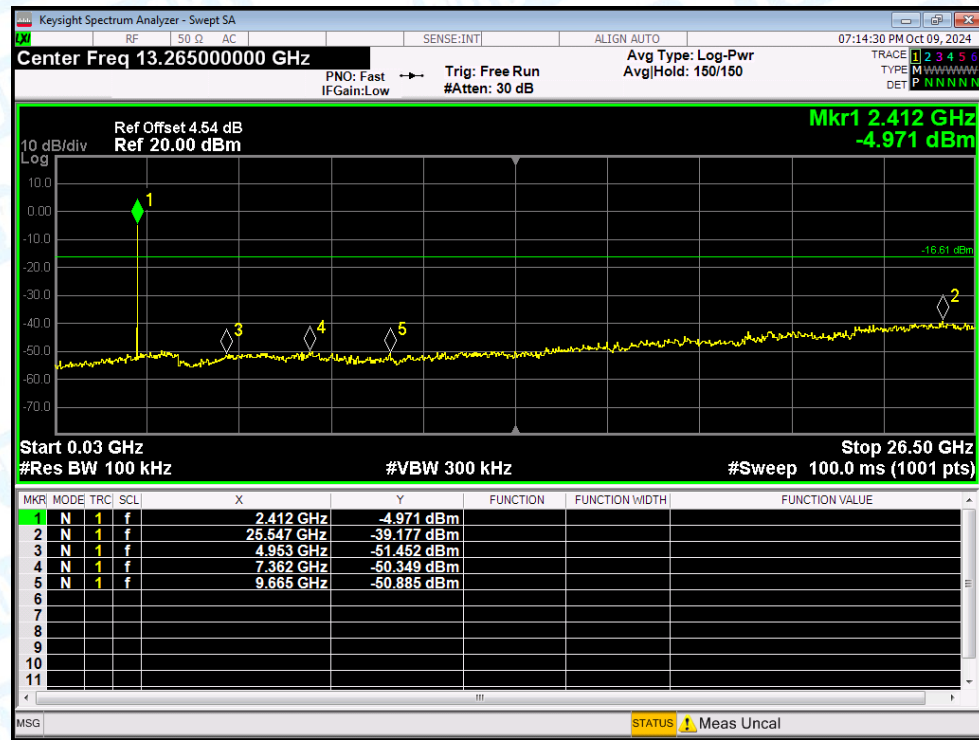
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	2.4G	2401	Ant1	-42.57	-20	Pass
NVNT	2.4G	2445	Ant1	-42.08	-20	Pass
NVNT	2.4G	2481	Ant1	-42.24	-20	Pass

Test Graphs

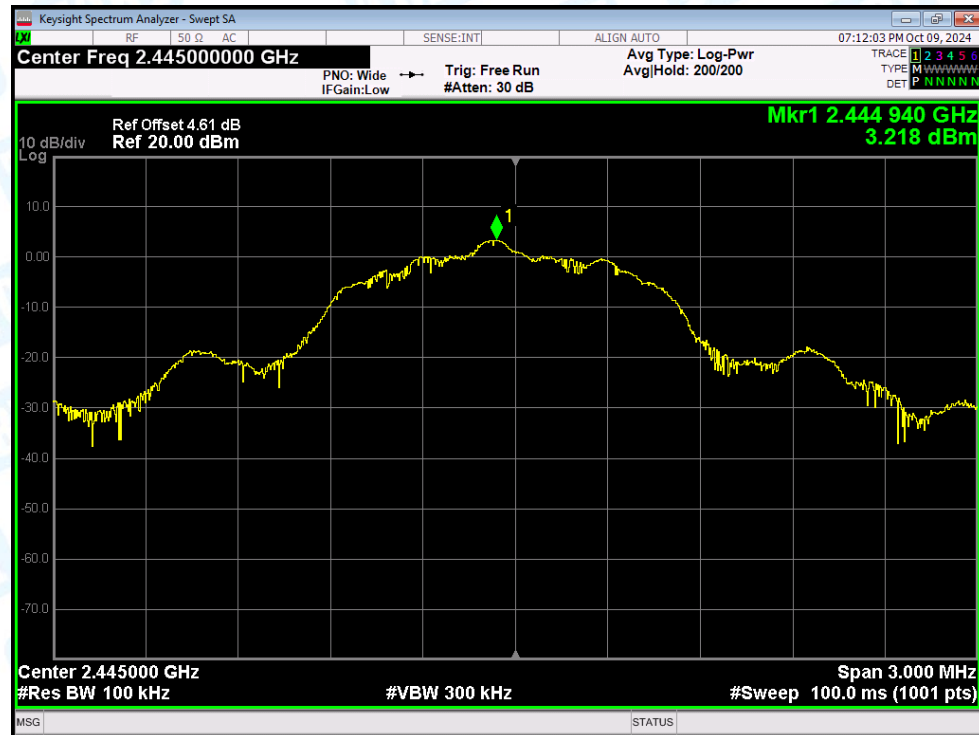
Tx. Spurious NVNT 2.4G 2401MHz Ant1 Ref



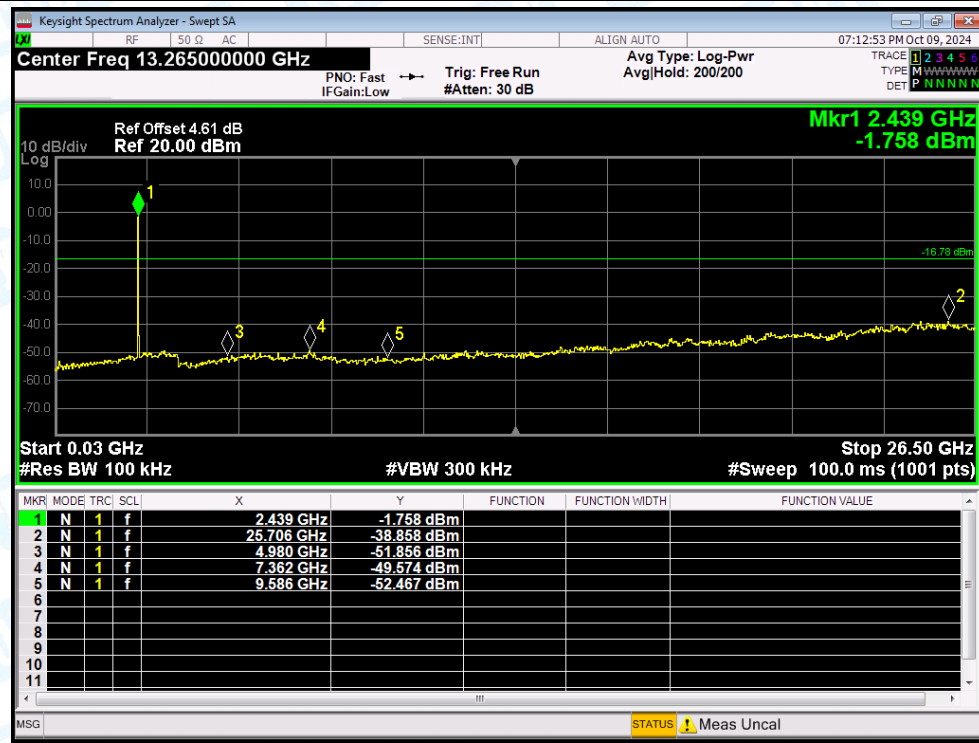
Tx. Spurious NVNT 2.4G 2401MHz Ant1 Emission



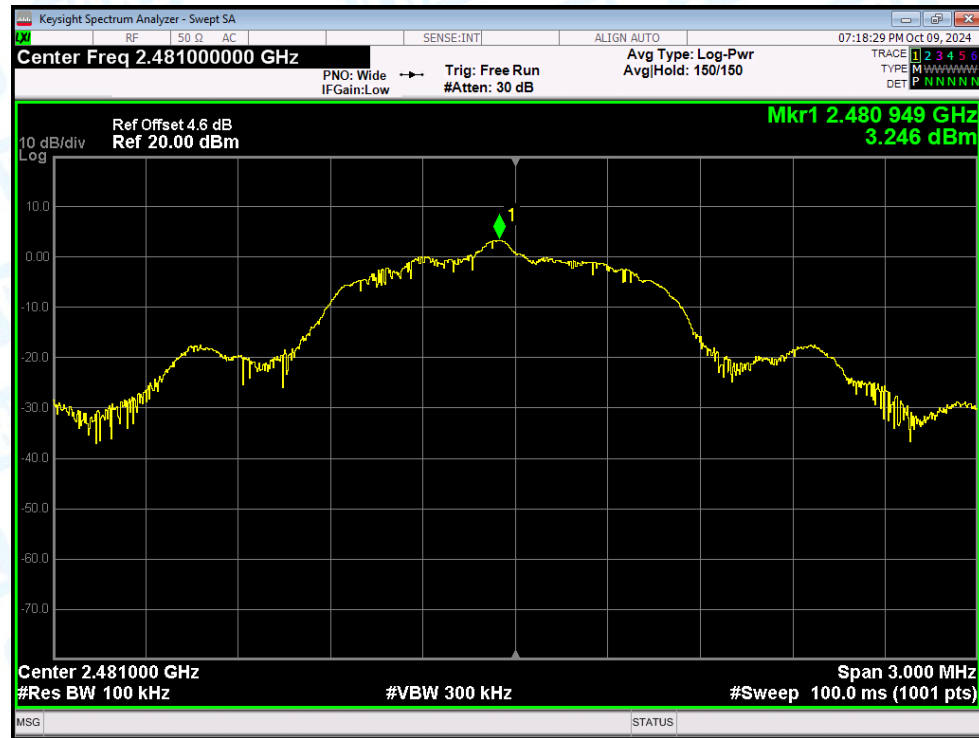
Tx. Spurious NVNT 2.4G 2445MHz Ant1 Ref



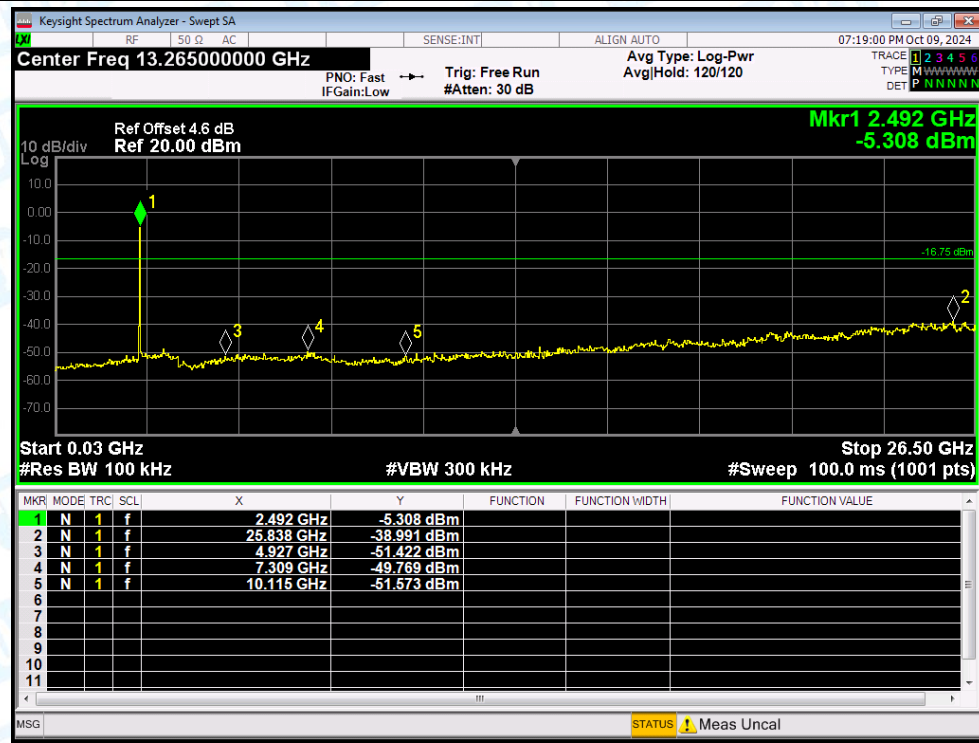
Tx. Spurious NVNT 2.4G 2445MHz Ant1 Emission



Tx. Spurious NVNT 2.4G 2481MHz Ant1 Ref



Tx. Spurious NVNT 2.4G 2481MHz Ant1 Emission



-----END OF THE REPORT-----